

Natural Heritage & Endangered Species Program MA Division of Fisheries & Wildlife Route 135 Westborough, MA 01581-3337 508-792-7270 x 200

MASSACHUSETTS RARE AND ENDANGERED PLANTS

PLYMOUTH GENTIAN

(Sabatia kennedyana Fern.)

DESCRIPTION

The Plymouth Gentian is a perennial herb, 12-25" (30-65cm.) tall, with narrowly lanceolate leaves 1-2" (2-5cm.) long. Its stems often bear a few alternating branches which terminate in long-pediceled flowers. The flowers are about 2" (5cm.) across, with a yellow center bordered with red and have 9-11 petals. It blooms from early July to mid September, depending on water levels. As a means of reproduction, it sends horizontal branches (or stolons) at or near the base of the plant that take root and develop into new plants.

SIMILAR PLANTS IN MASSACHUSETTS

Pink Tickseed (Coreopsis rosea) resembles Plymouth Gentian in this habitat except that Pink Tickseed has a composite flower that is much smaller and without the red border to the yellow center. It has linear leaves, and does not produce basal leaf clusters.

HABITAT IN MASSACHUSETTS

This species is found only on sandy to peaty shores of freshwater ponds on the coastal plain. It grows in large linear patches along the shore when water level drops. The water level of these ponds must fluctuate periodically to inundate the margins and stop invading shrubs. Species found in association with Plymouth Gentian include Eleocharis melanocarpa (Black-fruited Spike-rush), Drosera filiformis (Threadleaf Sundew), Fuirena pumila (Umbrella-grass), Gratiola aurea (Golden-pert), and Coreopsis rosea (Pink Tickseed).

(continued overleaf)



Distribution of Plymouth Gentian



Verified since 1978OReported prior to 1978

Distribution in Massachusetts by Town

PLYMOUTH GENTIAN (continued)

RANGE

Plymouth Gentian has a disjunct range, occurring only in small areas of southern Nova Scotia, southeastern Massachusetts, Rhode Island, North and South Carolina.

POPULATION STATUS

Plymouth Gentian is considered a species of "Special Concern" in Massachusetts. Currently, 1978 to present, ll2occurrences have been verified: historically 37 other occurrences have been reported. This species is rare because of its limited range. Additionally, development and recreational use of coastal plain ponds leads to trampling and destruction of this habitat, and pond contamination from run-off and faulty septic systems.